



## SEQUENCE LISTING

<110> Ashkenazi, Avi J.  
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<120> COMPOUNDS, COMPOSITIONS AND METHODS FOR  
 THE TREATMENT OF DISEASES CHARACTERIZED BY A33- RELATED  
 ANTIGENS

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 <151> 1999-03-05

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<150> US 60/066,364  
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 Lys Ser Val Thr Arg Glu Asp Thr Gly Thr Tyr Thr Cys Met Val Ser  
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Pro Lys Ser Thr Arg Ala Phe Ser Asn Ser Ser Tyr Val Leu Asn Pro  
180 185 190  
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195 200 205  
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225 230 235 240  
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245 250 255  
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Lys Tyr Gln Gly Arg Leu His Val Ser His Lys Val Pro Gly Asp Val  
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Cys Glu Val Thr Trp Gln Thr Pro Asp Gly Asn Gln Val Val Arg Asp  
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Val Thr Thr Gly Ser Gly Tyr Gly Phe Thr Val Pro Gln Gly Met Arg  
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Tyr Phe Cys Thr Ala Lys Gly Gln Val Gly Ser Glu Gln His Ser Asp  
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ctctGATGAG	ccctGCAtag	gacAGGAGTA	ccAGATCATC	gcccAGATCA	atggCAACTA	900
cggcccCTG	ctggACACAG	ttcCTCTGGA	ttatGAGTTT	ctggCCACTG	agggCAAAAG	960
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ctggTACTCC	tctCTAAATA	ccAGAGGGAA	gatGCCCATA	gcactAGGAC	ttggTCATCA	1260
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gctCTGCCAG	ctcAGAGGAC	cagCTATAC	caggATCATT	tctCTTCTT	caggGGCCAGA	1380
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Ala Cys Lys Thr Pro Lys Lys Thr Val Ser Ser Arg Leu Glu Trp Lys  
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Lys Leu Gly Arg Ser Val Ser Phe Val Tyr Tyr Gln Gln Thr Leu Gln  
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Cys Pro Gly Lys Arg Met Gln Val Asp Asp Leu Asn Ile Ser Gly Ile  
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Cys Thr Tyr Ser Gly Phe Ser Ser Pro Arg Val Glu Trp Lys Phe Val  
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Pro Tyr Ala Asp Arg Val Thr Phe Ser Ser Ser Gly Ile Thr Phe Ser  
85 90 95  
Ser Val Thr Arg Lys Asp Asn Gly Glu Tyr Thr Cys Met Val Ser Glu  
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115 120 125  
Val Pro Pro Ser Lys Pro Thr Ile Ser Val Pro Ser Ser Val Thr Ile  
130 135 140  
Gly Asn Arg Ala Val Leu Thr Cys Ser Glu His Asp Gly Ser Pro Pro  
145 150 155 160  
Ser Glu Tyr Ser Trp Phe Lys Asp Gly Ile Ser Met Leu Thr Ala Asp  
165 170 175  
Ala Lys Lys Thr Arg Ala Phe Met Asn Ser Ser Phe Thr Ile Asp Pro  
180 185 190  
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195 200 205  
Glu Tyr Tyr Cys Gln Ala Gln Asn Gly Tyr Gly Thr Ala Met Arg Ser  
210 215 220  
Glu Ala Ala His Met Asp Ala Val Glu Leu Asn Val Gly Gly Ile Val  
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Ala Ala Val Leu Val Thr Leu Ile Leu Leu Gly Leu Leu Ile Phe Gly  
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Val Trp Phe Ala Tyr Ser Arg Gly Tyr Phe Glu Thr Thr Lys Lys Gly  
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 agcaactctt cctatgtcct gaatcccaca acaggagacg tggctttga tcccctgtca 660  
 gcctctgata ctggagaata cagctgtgag gcacggaatg ggtatggac acccatgact 720  
 tcaaattgctg tgcgcatgga agctgtggag cggaatgtgg gggatcatgt ggcagccgtc 780  
 cttgttaaccc tgattctcct gggaatcttgc gttttggca tctgggttgc ctatagccga 840  
 ggccactttg acagaacaaa gaaaggggact tcgagtaaga aggtgattta cagccagcct 900  
 agtgcccgaa gtgaaggaga attcaaacag acctcgatcat tcctgggttg agcctggtcg 960  
 gctcaccggcc tatacatctgc atttgcctt ctcaggtgtc accggactct ggccccctgat 1020  
 gtctgttagtt tcacaggatg ccttattttgt ctctacacc ccacaggggcc ccctacttct 1080  
 tcggatgtgt ttttaataat gtcagctatg tgcccatcc tccttcatgc cctccctccc 1140  
 tttccttacca ctgctgggtg gccttggact tggtaatgg ttttattttcc catttctttg 1200  
 agggatcagg aaggaatctt gggatggccca ttgactttcc ttcttaatgg acagcaaaaa 1260  
 tggcgggggtt cgcaggaaatc tgcaactcaac tgcccacctg gctggaaaggg atctttgaat 1320  
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 tcttagagcgg gaatttagagg cttagagcggc tggaaatgg ttttgggtat gacactgggg 1440  
 tccttccatc tctggggccc actctttctt gtcttccat gggaaatggcc actggatcc 1500  
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 agctttgtt gtggagagac tagtaatgg tcaagaaatgg tggagaaatgg aggatttaaa 1620  
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 cagaggctga ggcaggcggc tcacctggagg tcggggatgtc gggatcggcc tgaccaacat 1740  
 ggagaaaaccc tactggaaat acaaagtttgc ccaggcatgg tggatgtc tgtagtccc 1800  
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<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Primer

<400> 12

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24

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<220>

<223> Synthetic Oligonucleotide Hybridization Probe

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<212> DNA

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<220>

<223> Synthetic Oligonucleotide Primer

<400> 14

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20

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<212> DNA

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<220>

<223> Synthetic Oligonucleotide Primer

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<220>  
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<400> 22  
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50

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 <212> PRT  
 <213> Homo sapiens

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 20 25 30  
 Ser Ser Pro Arg Val Glu Trp Lys Phe Asp Gln Gly Asp Thr Thr Arg  
 35 40 45  
 Leu Val Cys Tyr Asn Asn Lys Ile Thr Ala Ser Tyr Glu Asp Arg Val  
 50 55 60  
 Thr Phe Leu Pro Thr Gly Ile Thr Phe Lys Ser Val Thr Arg Glu Asp  
 65 70 75 80  
 Thr Gly Thr Tyr Thr Cys Met Val Ser Glu Glu Gly Gly Asn Ser Tyr  
 85 90 95  
 Gly Glu Val Lys Val Lys Leu Ile Val Leu Val Pro Pro Ser Lys Pro  
 100 105 110  
 Thr Val Asn Ile Pro Ser Ser Ala Thr Ile Gly Asn Arg Ala Val Leu  
 115 120 125  
 Thr Cys Ser Glu Gln Asp Gly Ser Pro Pro Ser Glu Tyr Thr Trp Phe  
 130 135 140  
 Lys Asp Gly Ile Val Met Pro Thr Asn Pro Lys Ser Thr Arg Ala Phe  
 145 150 155 160  
 Ser Asn Ser Ser Tyr Val Leu Asn Pro Thr Thr Gly Glu Leu Val Phe  
 165 170 175  
 Asp Pro Leu Ser Ala Ser Asp Thr Gly Glu Tyr Ser Cys Glu Ala Arg  
 180 185 190  
 Asn Gly Tyr Gly Thr Pro Met Thr Ser Asn Ala Val Arg Met Glu Ala  
 195 200 205  
 Val Glu Arg Asn Val Gly Val Ile Val Ala Ala Val Leu Val Thr Leu  
 210 215 220  
 Ile Leu Leu Gly Ile Leu Val Phe Gly Ile Trp Phe Ala Tyr Ser Arg  
 225 230 235 240  
 Gly His Phe Asp Arg Thr Lys Lys Gly Thr Ser Ser Lys Lys Val Ile  
 245 250 255  
 Tyr Ser Gln Pro  
 260

<210> 24  
 <211> 270  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 24

Val Arg Val Thr Val Asp Ala Ile Ser Val Glu Thr Pro Gln Asp Val  
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 20 25 30  
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 35 40 45  
 Leu Thr His Thr Glu Arg Val Val Ile Trp Pro Phe Ser Asn Lys Asn  
 50 55 60  
 Tyr Ile His Gly Glu Leu Tyr Lys Asn Arg Val Ser Ile Ser Asn Asn  
 65 70 75 80  
 Ala Glu Gln Ser Asp Ala Ser Ile Thr Ile Asp Gln Leu Thr Met Ala  
 85 90 95  
 Asp Asn Gly Thr Tyr Glu Cys Ser Val Ser Leu Met Ser Asp Leu Glu  
 100 105 110  
 Gly Asn Thr Lys Ser Arg Val Arg Leu Leu Val Leu Val Pro Pro Ser  
 115 120 125  
 Lys Pro Glu Cys Gly Ile Glu Gly Glu Thr Ile Ile Gly Asn Asn Ile  
 130 135 140  
 Gln Leu Thr Cys Gln Ser Lys Glu Gly Ser Pro Thr Pro Gln Tyr Ser  
 145 150 155 160  
 Trp Lys Arg Tyr Asn Ile Leu Asn Gln Glu Gln Pro Leu Ala Gln Pro  
 165 170 175  
 Ala Ser Gly Gln Pro Val Ser Leu Lys Asn Ile Ser Thr Asp Thr Ser  
 180 185 190  
 Gly Tyr Tyr Ile Cys Thr Ser Ser Asn Glu Glu Gly Thr Gln Phe Cys  
 195 200 205  
 Asn Ile Thr Val Ala Val Arg Ser Pro Ser Met Asn Val Ala Leu Tyr  
 210 215 220  
 Val Gly Ile Ala Val Gly Val Val Ala Ala Leu Ile Ile Ile Gly Ile  
 225 230 235 240  
 Ile Ile Tyr Cys Cys Cys Arg Gly Lys Asp Asp Asn Thr Glu Asp  
 245 250 255  
 Lys Glu Asp Ala Arg Pro Asn Arg Glu Ala Tyr Glu Glu Pro  
 260 265 270

&lt;210&gt; 25

&lt;211&gt; 263

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 25

Leu Cys Ser Leu Ala Leu Gly Ser Val Thr Val His Ser Ser Glu Pro  
 1 5 10 15  
 Glu Val Arg Ile Pro Glu Asn Asn Pro Val Lys Leu Ser Cys Ala Tyr  
 20 25 30  
 Ser Gly Phe Ser Ser Pro Arg Val Glu Trp Lys Phe Asp Gln Gly Asp  
 35 40 45  
 Thr Thr Arg Leu Val Cys Tyr Asn Asn Lys Ile Thr Ala Ser Tyr Glu  
 50 55 60  
 Asp Arg Val Thr Phe Leu Pro Thr Gly Ile Thr Phe Lys Ser Val Thr  
 65 70 75 80  
 Arg Glu Asp Thr Gly Thr Tyr Thr Cys Met Val Ser Glu Glu Gly Gly  
 85 90 95  
 Asn Ser Tyr Gly Glu Val Lys Val Lys Leu Ile Val Leu Val Pro Pro  
 100 105 110  
 Ser Lys Pro Thr Val Asn Ile Pro Ser Ser Ala Thr Ile Gly Asn Arg  
 115 120 125  
 Ala Val Leu Thr Cys Ser Glu Gln Asp Gly Ser Pro Pro Ser Glu Tyr  
 130 135 140

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Thr Trp Phe Lys Asp Gly Ile Val Met Pro Thr Asn Pro Lys Ser Thr  
145 150 155 160  
Arg Ala Phe Ser Asn Ser Ser Tyr Val Leu Asn Pro Thr Thr Gly Glu  
165 170 175  
Leu Val Phe Asp Pro Leu Ser Ala Ser Asp Thr Gly Glu Tyr Ser Cys  
180 185 190  
Glu Ala Arg Asn Gly Tyr Gly Thr Pro Met Thr Ser Asn Ala Val Arg  
195 200 205  
Met Glu Ala Val Glu Arg Asn Val Gly Val Ile Val Ala Ala Val Leu  
210 215 220  
Val Thr Leu Ile Leu Leu Gly Ile Leu Val Phe Gly Ile Trp Phe Ala  
225 230 235 240  
Tyr Ser Arg Gly His Phe Asp Arg Thr Lys Lys Gly Thr Ser Ser Lys  
245 250 255  
Lys Val Ile Tyr Ser Gln Pro  
260

<210> 26

<211> 273

<212> PRT

<213> Homo sapiens

<400> 26

Leu Cys Ala Val Arg Val Thr Val Asp Ala Ile Ser Val Glu Thr Pro  
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Gln Asp Val Leu Arg Ala Ser Gln Gly Lys Ser Val Thr Leu Pro Cys  
20 25 30  
Thr Tyr His Thr Ser Thr Ser Arg Glu Gly Leu Ile Gln Trp Asp  
35 40 45  
Lys Leu Leu Leu Thr His Thr Glu Arg Val Val Ile Trp Pro Phe Ser  
50 55 60  
Asn Lys Asn Tyr Ile His Gly Glu Leu Tyr Lys Asn Arg Val Ser Ile  
65 70 75 80  
Ser Asn Asn Ala Glu Gln Ser Asp Ala Ser Ile Thr Ile Asp Gln Leu  
85 90 95  
Thr Met Ala Asp Asn Gly Thr Tyr Glu Cys Ser Val Ser Leu Met Ser  
100 105 110  
Asp Leu Glu Gly Asn Thr Lys Ser Arg Val Arg Leu Leu Val Leu Val  
115 120 125  
Pro Pro Ser Lys Pro Glu Cys Gly Ile Glu Gly Glu Thr Ile Ile Gly  
130 135 140  
Asn Asn Ile Gln Leu Thr Cys Gln Ser Lys Glu Gly Ser Pro Thr Pro  
145 150 155 160  
Gln Tyr Ser Trp Lys Arg Tyr Asn Ile Leu Asn Gln Glu Gln Pro Leu  
165 170 175  
Ala Gln Pro Ala Ser Gly Gln Pro Val Ser Leu Lys Asn Ile Ser Thr  
180 185 190  
Asp Thr Ser Gly Tyr Tyr Ile Cys Thr Ser Ser Asn Glu Glu Gly Thr  
195 200 205  
Gln Phe Cys Asn Ile Thr Val Ala Val Arg Ser Pro Ser Met Asn Val  
210 215 220  
Ala Leu Tyr Val Gly Ile Ala Val Gly Val Val Ala Ala Leu Ile Ile  
225 230 235 240  
Ile Gly Ile Ile Ile Tyr Cys Cys Cys Cys Arg Gly Lys Asp Asp Asn  
245 250 255  
Thr Glu Asp Lys Glu Asp Ala Arg Pro Asn Arg Glu Ala Tyr Glu Glu  
260 265 270  
Pro

<210> 27

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<211> 413

<212> DNA

<213> Artificial Sequence

<220>

<223> Consensus DNA Sequence

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aggccaaaac ctggaaagagg atacagtac tctggaaagta ttagtggctc cagcagttcc 120  
atcatgtgaa gtaccctctt ctgctctgag tggaaactgtg gtagagctac gatgtcaaga 180  
caaagaaggg aatccagctc ctgaatacac atggtttaag gatggcatcc gtttgctaga 240  
aaatcccaga cttggctccc aaagcaccaa cagctcatac acaatgaata caaaaactgg 300  
aactctgcaa ttaataactg tttccaaact ggacactgga gaatattcct gtgaagcccg 360  
caattctgtt ggatatcgca ggtgtccctgg ggaaacgaat gcaagtagat gat 413

<210> 28

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Primer

<400> 28

atcggttgtga agtttgtgcc cc 22

<210> 29

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Primer

<400> 29

acctgcgata tccaaacagaa ttg 23

<210> 30

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Hybridization Probe

<400> 30

ggaagaggat acagtcactc tggaaagtatt agtggctcca gcagttcc 48